

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-44. (Canceled)

45. (Currently Amended) ~~A remote gateway agent installed in a wireless gateway in a wireless data network for enabling remote data access to and task execution on a processing system on a wired data network through a remote proxy agent comprising A system for enabling remote access to an application residing on a processing system comprising:~~

~~the wireless-a gateway comprising an instance of a remote gateway agent, wherein the gateway is accessible to a wireless network-capable user device via the-a wireless data network and accessible to a-an instance of a remote proxy agent operating on the processing system via the wired data network, and wherein the remote gateway agent is adaptedis configured for:~~

receiving a request from the wireless network-capable user device for a task to be performed by the processing system; and

forwarding the task request to the remote proxy agent residing on the processing system, wherein the remote proxy agent comprises an interface to the application is adaptedand is configured for:

receiving and analyzing the task request from the remote gateway agent;
executing the selected application via the interface to process the requestdirecting the request to the processing system for processing; and

sending a result from the processing system to the remote gateway agent; and

wherein the remote gateway agent is further adapted-is further configured for:

receiving the result;

transcoding the result for viewing by the wireless network-capable user device; and sending the result to the wireless network-capable user device via the wireless data network.

46. (Currently Amended) The remote gateway agent system of claim 45 wherein the processing system is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.

47. (Canceled)

48. (Currently Amended) The ~~remote gateway agent system~~ of claim 45, wherein the processing system comprises at least one application selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.

49. (Currently Amended) The ~~remote gateway agent system~~ of claim 45, wherein the task request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the processing system, and powering off the device connected to the processing system.

50. (Currently Amended) The ~~remote gateway agent system~~ of claim 45, wherein the remote gateway agent ~~is further adapted~~is further configured for:

receiving a registration request from the remote proxy agent, wherein the remote proxy agent resides on the processing system; and
registering the remote proxy agent with the remote gateway agent.

51. (Currently Amended) The ~~remote gateway agent system~~ of claim 45, wherein the remote gateway agent ~~is further adapted~~is further configured for:

determining whether the user device is entitled to request the task from the processing system; and
establishing a path to ~~a~~the remote proxy agent if the user device is ~~entitled~~entitled to request the task from the processing system.

52. (Currently Amended) The remote gateway of claim 45, wherein the remote proxy agent ~~is further adapted~~is further configured for registering with the remote gateway agent.

53. (Canceled)

54. (Canceled)

55. (Currently Amended) The ~~remote gateway agent system~~ of claim 45, wherein the wireless network-capable device is a WAP enabled cellular phone.

56. (Currently Amended) The ~~remote gateway agent system~~ of claim 45, wherein the request specifies a serial execution of serial tasks and return of results.

57. (Currently Amended) The ~~remote gateway agent system~~ of claim 45, wherein a plurality of requests ~~are~~is sent to the processing system in an un-interrupted data session.

58. (Currently Amended) A remote proxy agent residing in a processing system ~~on-a-wired-data-network~~ for enabling remote data access to a software application comprising:

a registration processor adapted for sending a registration request to a remote gateway agent residing on a wireless gateway on a wireless data network, wherein the gateway is accessible to a wireless network-capable user device via the wireless data network;

a request analyzer ~~adaptedconfigured~~ for receiving, parsing and verifying a task request forwarded by the remote proxy agent from the wireless network-capable user device;

a request processor ~~adaptedconfigured~~ for processing the task request for task-performance instructions;

an application program interface ~~adaptedconfigured~~ for sending the task-performance instruction to the software application; and

a results processor ~~adaptedconfigured~~ for sending a result from the software application to the remote gateway agent for forwarding to the wireless network-capable user device via the wireless data network, the remote gateway agent ~~being adaptedconfigured~~ for:

receiving the result; and

transcoding the result for viewing by the wireless network-capable user device.

59. (Previously Presented) The remote proxy agent of claim 58, wherein the processing system is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.

60. (Canceled)

61. (Currently Amended) The remote proxy agent of claim 58, wherein the task request is selected from the group consisting of ~~search~~ searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the processing system, and powering off the device connected to the processing system.

62. (Previously Presented) The remote proxy agent of claim 58, wherein the software application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.

63. (Previously Presented) The software application of claim 58, wherein the request analyzer, the request processor and the results processor utilize resident processing capability of the host device.

64. (Currently Amended) A method for enabling remote data access to a selected application residing to and task execution on a processing system on a wired network through remote agents, comprising:

receiving at a remote gateway agent a registration request from a remote proxy agent, wherein the remote proxy agent comprises an interface to the selected application and resides on the processing system and wherein the remote gateway agent resides on a wireless gateway connecting a wireless network with the wired network;

registering the remote proxy agent with the remote gateway agent;

receiving a request for access to the processing system from a wireless network-capable user device;

determining at the gateway whether the user device is entitled to access the processing system; and

forwarding the request for access to the processing system if the user device is entitled to access the processing system; and

receiving and analyzing the request from the remote gateway agent at the remote proxy agent;

executing the selected application via the interface to process the request~~directing the request to the processing system for processing~~;

sending a result from the processing system~~remote proxy agent~~ to the user device via the wired network;

receiving the result at the remote gateway agent;

transcoding the result for viewing by the user device; and

sending the result to the user device via the wireless data network.

65. (Previously Presented) The method of claim 64, wherein the user device comprises a WAP enabled phone and the wired network comprises the Internet.

66. (Canceled)

67. (Canceled)

68. (Previously Presented) The method of claim 64, wherein the processing is performed by an operating system component of the processing system.

69. (Previously Presented) The method of claim 64, wherein the steps are conducted repeatedly in the course of a single data session between the user device and the data system.

70-80 (Canceled)

81. (New) A system for enabling remote access to an application comprising:
one or more data processing computers, wherein each of the one or more data processing computers comprises at least one application and wherein each of the one or more data processing computers is connected to a first network;
a proxy server, wherein the proxy server is connected to a second network and wherein the first and second network may each access the other;
a software system comprising a proxy server instance residing on the proxy server and remote software instances residing on each of the one or more data processing computers, wherein the proxy server instance is configured for:

authenticating each of the remote instances residing on the one or more data processing computers;

identifying and authenticating a user of a user device;

receiving a request from the user device directed to a selected application on a selected one of the one or more data processing computers; and

redirecting the request from the proxy server to the remote software instance residing on the selected data processing computer via the first and second networks, and

wherein the remote software instance residing on the selected one or more data processing computers comprises an interface to the selected application and wherein the remote software instance is configured for:

providing authentication information to the proxy server instance;

receiving the request;

executing the selected application via the interface to process the request;

receiving a result from the selected application; and

sending the result from the selected application to the proxy server instance via the first and second networks, and

wherein the proxy server instance is further configured for sending the result to the user device.

82. (New) The system of claim 81, wherein the one or more data processing computers is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.

83. (New) The system of claim 81, wherein the at least one application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.

84. (New) The system of claim 81, wherein the request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the one or more data processing computers, and powering off the device connected to the one or more data processing computers.

85. (New) The system of claim 81, wherein the remote software instance comprises an application program interface for communicating with the selected application.

86. (New) The system of claim 81, wherein the proxy server instance is further configured for determining whether the user device is entitled to direct the request to the one or more data processing computers.

87. (New) The system of claim 81, wherein each of the one or more data processing computers is configured to register with the proxy server.

88. (New) The system of claim 81, wherein the second network is a wireless network and the user device is a wireless device.

89. (New) The system of claim 81, wherein the request specifies a serial execution of serial tasks and return of results.

90. (New) The system of claim 81, wherein a plurality of requests is sent to the one or more data processing computers in an un-interrupted data session.

91. (New) The system of claim 81, wherein the proxy server instance is further configured for transcoding the result for viewing by the user device prior to sending the result to the user device.

92. (New) A method for enabling remote data access to a selected application residing on a data processing computer comprising:

connecting one or more data processing computers to a first network, wherein each of the one or more data processing computers comprises at least one application;
connecting a proxy server to a second network, wherein the first and second network may each access the other;
configuring a software system to operate a proxy server instance and remote software instances, wherein the proxy server instance resides on the proxy server and the remote software instances reside on each of the one or more data processing computers and wherein configuring the software system comprises:

configuring the proxy service instance for:

authenticating each of the remote instances residing on the one or more data processing computers;
identifying and authenticating a user of a user device;
receiving a request from the user device directed to a selected application on a selected one of the one or more data processing computers; and redirecting the request from the proxy server to the remote software instance residing on the selected data processing computer via the first and second networks, and

configuring the remote software instance residing on the selected one or more data processing computers for:

providing authentication information to the proxy server instance;
receiving the request;
directing the request to the selected application for processing;
receiving a result from the selected application; and
sending the result from the selected application to the proxy server instance via the first and second networks, and

further configuring the proxy server instance for sending the result to the user device.

93. (New) The method of claim 92, wherein the second network is a wireless network and the user device is a wireless device.

94. (New) The method of claim 92, wherein directing the request to the selected application for processing comprises directing the request to the selected application for processing via an application program interface between the remote software instance and the selected application.

95. (New) The method of claim 92, wherein the processing is performed by an operating system component of the processing system.
96. (New) The method of claim 92 wherein the steps are conducted repeatedly in the course of a single data session between the user device and the one or more data processing computers.
97. (New) The method of claim 92, wherein the one or more data processing computers is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.
98. (New) The method of claim 92, wherein the at least one application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.
99. (New) The method of claim 92, wherein the request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the one or more data processing computers, and powering off the device connected to the one or more data processing computers.
100. (New) The method of claim 92 further comprising configuring the proxy server instance to determine whether the user device is entitled to direct the request to the one or more data processing computers.
101. (New) The method of claim 92 further comprising configuring each of the one or more data processing computers for registering with the proxy server.
102. (New) The method of claim 92 further comprising transcoding the result for viewing by the user device prior to sending the result to the user device.